

04/09/2003

L1 ANSWER 1 OF 3 WPIX (C) 2003 THOMSON DERWENT  
AN 1988-332879 [47] WPIX  
TI Semiconductor LED enabling accurate alignment - has planar element located  
to oppose light emitting window to lens through opening NoAbstract Dwg  
1/3.  
DC U12  
PA (FURU) FURUKAWA ELECTRIC CO LTD  
CYC 1  
PI JP 63244781 A 19881012 (198847)\* 8p <--  
ADT JP 63244781 A JP 1987-76231 19870331  
PRAI JP 1987-76231 19870331  
PI JP 63244781 A 19881012 (198847)\* 8p <--  
ADT JP 63244781 A JP 1987-76231 19870331  
PRAI JP 1987-76231 19870331

L1 ANSWER 2 OF 3 JAPIO COPYRIGHT 2003 JPO  
AN 1988-244781 JAPIO  
TI SEMICONDUCTOR LIGHT EMITTING DEVICE  
IN FUKUSHIMA TORU; IKEGAMI YOSHIKAZU  
PA FURUKAWA ELECTRIC CO LTD:THE  
PI **JP 63244781** A 19881012 Showa  
AI JP 1987-76231 (JP62076231 Showa) 19870331  
PRAI JP 1987-76231 19870331  
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1988  
AB PURPOSE: To realize a precise alignment of an optical axis by a method  
wherein a planar light emitting element is positioned so as to face toward  
a lens through the intermediary of an opening of a light emitting window  
and sealed with sealing resin.  
CONSTITUTION: An opening 2, which is so formed as to get gradually broader  
in diameter with outward distance, is provided at a floor section of a  
metallic stem 1, with which a ball lens is connected. A lead pin 5 through  
intermediary of an insulating component 4 and a lead pin 6 not insulated  
are uprightly provided at prescribed positions of the metallic stem floor.  
A planar light emitting element 8 is die-bonded to the metallic stem 1  
floor so as to render a light emitting window 7 to face toward the opening  
2. An electrode 9 is provided on one side of the planar light emitting  
element 8 so as to leave the light emitting window open and an electrode  
10 is provided on the other side of the element 8. The electrode 10 is  
connected with a protruding part 11 of the pin 5 with gold wire. And, the  
metallic stem 1 is filled with epoxy resin 13.  
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L2 ANSWER 1 OF 3 WPIX (C) 2003 THOMSON DERWENT  
AN 1983-713925 [29] WPIX  
TI Laser diode package with optical system - unifies laser diode package  
decreasing fluctuation caused by temp. and degradation caused by resin.  
NoAbstract.  
DC U11 U12 V07 V08  
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP  
CYC 1  
PI JP 58097884 A 19830610 (198329)\* 6p <--  
PRAI JP 1981-196214 19811208  
PI JP 58097884 A 19830610 (198329)\* 6p <--  
PRAI JP 1981-196214 19811208

L2 ANSWER 2 OF 3 JAPIO COPYRIGHT 2003 JPO  
AN 1983-097884 JAPIO  
TI PACKAGE FOR LASER DIODE WITH OPTICAL SYSTEM  
IN TOKURA NOBUYUKI  
PA NIPPON TELEGR & TELEPH CORP <NTT>  
PI **JP 58097884** A 19830610 Showa  
AI JP 1981-196214 (JP56196214 Showa) 19811208  
PRAI JP 1981-196214 19811208  
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1983  
AB PURPOSE: To reduce variation and a secular change due to a temperature by  
using the inner wall of the conical hole of a mounting jig as a tool  
positioning a spherical lens and adjusting output beams by the diameter of  
the spherical lens and a prism.  
CONSTITUTION: A sub-mount 5 to which a laser diode (LD) chip 3 is bonded  
is bonded with the LD mouning jig 6, a lead wire 15 is attached to the LD,  
and the LD mounting jig 6 is fixed to a radiator plate by using a  
reference surface 8 and a screw 7. The conical hole 9  
( $\lambda$ )T( $\lambda$ ) is inserted, and temporarily fixed by means of  
hold-down springs 11, the LD chip 3 is conducted, and LD output is  
measured through the spherical lens 10. The focal distance of the  
spherical lens 10 required is obtained, and the spherical lens 10 with the  
focal distance is inserted into the conical hole 9, and fastened through  
spot welding or soldering by using the hold-down spring 11. The  
displacement of the angle of the output beams 17 from the spherical lens  
10 is measured, and the prism 12 with a vertical angle through which is  
displacement is extinguished, is fixed to the LD mounting jig 6 by glass  
solder 13.  
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